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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,064	08/31/2001	Gregory T. Gaudet	01048	8322

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EXAMINER

THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
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1723

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DATE MAILED: 03/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,064

Applicant(s)

GAUDET

Examiner

THERKORN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 25, 2003 and March 7, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above, claim(s) 11, 14-35, 37, 38, 44, and 45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-13, 36, 39-43, and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4,5, & 8 6) ☐ Other: _____

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10, 12-13, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989). At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in reciting use of an organic group and claims 12-13 further differ in reciting use of a temperature of less than 800⁰ C. Mimori (U.S. Patent No. 5,476,989) (column 2, lines 15-24 and 53-56, column 4, lines 3-8, and column 4, line 60-column 5, line 20) discloses use of functional groups of a carbonized adsorbent allows selectivity. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic. It would have been obvious to use functional groups in Ichikawa (U.S. Patent No. 5,270,280) because Mimori (U.S. Patent No. 5,476,989) (column 2, lines 15-24 and 53-56, column 4, lines 3-8, and column 4, line 60-column 5, line 20) discloses use of functional groups of a carbonized adsorbent allows selectivity. It would have been obvious to carbonize at 500⁰ C in Ichikawa (U.S. Patent No. 5,270,280) because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic.

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Claims 1-10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in reciting use of an organic group. Abstract of JP 02193066 discloses binding functional groups to carbon particles. Holmes (WO 95/01838) (page 1, lines 1-4 and the sentence bridging pages 1 and 2) discloses binding functional groups to carbon chromatography material enhances the selectivity of the adsorbent. Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances. It would have been obvious to use a functional group in Ichikawa (U.S. Patent No. 5,270,280) because Abstract of JP 02193066 discloses binding functional groups to carbon particles and because Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances. It would have been obvious to use a functional group in Ichikawa (U.S. Patent No. 5,270,280) because Holmes (WO 95/01838) (page 1, lines 1-4 and the sentence bridging pages 1 and 2) discloses binding functional groups to carbon chromatography material enhances the selectivity of the adsorbent and because Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances.

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Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 as applied to claims 1-10 and 36 above, and further in view of either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 in reciting use of a temperature of less than 800⁰ C. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic. Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500⁰ C forms a support useful for adsorption. It would have been obvious to use a temperature of less than 800⁰ C in Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 either because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic or because Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500⁰ C forms a support useful for adsorption.

Claims 39-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) as applied to claims 1-10, 12-13, and 36 above, and further in view of Dias (U.S. Patent No. 4,619,805). At

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best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 39-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 as applied to claims 12-13 above, and further in view of Dias (U.S. Patent No. 4,619,805). At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages

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218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805). At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 39, 40, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805) as applied to claims 41 and 46 above, and further in view of either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805) in reciting use of a temperature of less than 800⁰ C. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic. Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500⁰ C forms a support useful for adsorption. It would have been obvious to use a temperature of less than 800⁰ C in Ichikawa (U.S. Patent No. 5,270,280) in

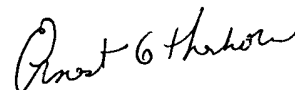
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view of Dias (U.S. Patent No. 4,619,805) because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500⁰ C allows carbon to become hydrophilic or because Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500⁰ C forms a support useful for adsorption.

The remarks urge that the inventions of Groups II and III should be examined with the invention of Group I because there is no serious burden on the examiner. However, Group II would require additional searching Class 210, subclasses 635 and 656 as well as other chromatographic method subclasses and Group III would require searching Class 502, subclass 439 as well as other method of making granule subclasses. The additional search as well as the different issues of patentability would be an enormous burden on the examiner. Accordingly, the restriction requirement and elections of species been reconsidered, deemed proper, and made final for the reasons of record.

Claims 11 and 44-45 have been withdrawn as being drawn to non-elected species.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.



Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT/12
March 20, 2003